UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/532,404	03/22/2000	Larry D. Hebel	063170.2324	8301

7590 08/10/2004		EXAMINER
Baker & Botts L. L. P. 2001 Ross Avenue Dallas, TX 75201-2980		NGUYEN, QUANG N

ART UNIT	PAPER NUMBER
2141	

DATE MAILED: 08/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	**Applicant(s)**
Office Action Summary	09/532,404	HEBEL ET AL.
	Examiner	**Art Unit**
	Quang N. Nguyen	2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>03 June 2004</u> .

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>7-10 and 16-36</u> is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>7-10 and 16-36</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>22 March 2000</u> is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some * c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Detail Action

1.   This Office Action is in response to the Amendment filed on 06/03/2004. Claim

7, 16, 24 and 32 has been amended.   Claims 7-10 and 16-36 are presented for

examination.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3.   **Claims 7-10 and 16-18 are rejected under 35 U.S.C. 103(a) as being**

unpatentable over Li et al. (US 5,699,523), herein after referred as Li, in view of

Hluchyj et al. (US 5,231,633), herein after referred as Hluchyj.

4.   As to claim 7, Li teaches a method for communication between at least one client

and at least one server in a computer network, comprising the steps of:

sending a message having a priority level *(the message has a seventh field*

priority of four eight-bit bytes, to indicate the degree of priority) from the client 39 to the

information processing server 38, the message requesting processing by the server 38

(Li, Figs. 2-3 and C4: L4-34);

receiving the message at the server 38 *(through the router 360 of Figs. 2-3)*;

However, Li does not explicitly teach the steps of reading the priority level of the

message, determining a current client rotation position of the client at the server, and

inserting the message into the message queue by the server in response to the priority

level and the current client rotation position of the client.

In the related art, Hluchyj teaches a queueing and dequeueing mechanism for

use in an integrated fast packet network, wherein fast packets from different traffic types

are multiplexed with one another through use of a weighted round-robin bandwidth

allocation mechanism, comprising the steps of:

reading the priority level *(i.e., reading 2 bits in the header of each fast packet that*

indicates a discard priority to classify the messages) of the message at the server;

determining at the server a current client rotation position of the client *(the*

data/voice packets are classified into discard priorities and put into priority queues then

performed on a rotating or "round robin" fashion by the round robin packet selector to

obtain an equal chance of access and avoid starvation); and

inserting the message into the message queue *(enqueueing fast packets using*

header information to the appropriate queue) for processing by the server in response

to the priority level and the current client rotation position of the client (Hluchyj, C4: L41-

61, C5: L43-68, C6: L1-56 and C7: L17-59).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify and combine the teachings of Li and Hluchyj to include the steps of reading the priority level of the message, determining a current client rotation position of the client at the server, and inserting the message into the message queue by the server in response to the priority level and the current client rotation position of the client because it would avoid starvation and allow messages to be handled from highest to lowest priority by the prioritization of messages (fast packets) of different traffic types, round robin fashion selectively discarding of certain messages, and bandwidth allocation through multiplexing.

5.   As to claim 8, Li-Hluchyj teaches the method of claim 7, further comprising the steps of sequentially processing a plurality of messages from the message queue by the server (Li, C5: L29-49; Hluchyj, C6: L57-68 and C7: L1-16).

6.   As to claim 9, Li-Hluchyj teaches the method of claim 8, further comprising the steps of storing incoming messages for insertion into the message queue (i.e., storing various incoming fast packets into multiple queues 507-509, 506, 511-513 of Figs. 5-6) during the sequential processing of messages by the server (Hluchyj, C5: L43-63).

7.   As to claim 10, Li-Hluchyj teaches the method of claim 7, further comprising the steps of: determining address information (Li, a tenth field formed of four eight-bit bytes identifying the addressee of the message) for the server by the client; and creating at the client the message including the address information for the server (Li, C4: L4-34).

8.   Claims 16-18 are corresponding network system claims of claims 7-9; therefore, they are rejected under the same rationale.

9.   Claim 19-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li, in view of Hluchyj, and further in view of Gyllstrom et al. (US 5,179,708), herein after referred as Gyllstrom.

10.   As to claim 19, Li-Hluchyj teaches a network system of claim 16 but does not explicitly teach the server to store and process the first message before the second message if the first message's priority level is higher than the second one's or if the first and second have the same priority level and the first client's rotation position is before the second client's rotation position.

In the related art, Gyllstrom teaches a system for message delivery wherein the message is immediately delivered to destination or stored in one of a plurality of

message queues based on its priority level (Gyllstrom, Figs. 4-5 and corresponding text, C4: L21-68 and C5: L1-27).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify and combine the teachings of Li-Hluchyj and Gyllstrom to store and process messages based on their priority levels and rotation positions because it would guarantee that messages are delivered at the same priority as they were sent and hence do not cause preemption of higher-priority processes (Gyllstrom, C1: L65 - C2: L1).

11.   As to claims 20-23, Li-Hluchyj-Gyllstrom teaches the network system of claim 16, wherein the server is further operable to store the messages in a queue according to the messages' priority levels and the clients' rotation positions and to process the messages in order of storage in the queue (Gyllstrom, C3: L67-68, C4 and C5: L1-27).

12.   Claims 24-31 are corresponding server claims of claims 16-23; therefore, they are rejected under the same rationale.

13.   Claims 32-36 are corresponding method claims of claims 16-23; therefore they are rejected under the same rationale.

Response to Arguments

14.   In the remarks, applicant argued in substance that

(**A**)   Prior Arts do not teach, suggest, or disclose, "sending a message having a priority level from the client to the server, the message requesting processing by the server".

As to point (**A**), before addressing the argument, it is noted that the language of the limitation cited in the quotation can be given broad and reasonable interpreted in light of specification as sending a message *(data/voice packets)* having a priority level *(i.e., having a field indicating the degree of priority)* from the client *(from a sending user/application)* to the server, the message requesting processing *(prioritizing, selectively discarding, multiplexing and transmitting, etc.)* by the server *(i.e., by an information processing server, a proxy server, a router, or an internodal trunk, etc).*

Li teaches a method for communication between at least one client and at least one server in a computer network, wherein **the client 39 sends a message having a seventh field priority of four eight-bit bytes, to indicate the degree of priority to the information processing server 38 as in Figs. 2-3**, for processing and sending the responses for the requests *(i.e., sending a message having a priority level from the client to the server, the message requesting processing by the server)* (**Li**, Figs. 2-3, C4: L4-34 and C5: L29 – C6:L3).

Hluchyj teaches a method for prioritizing, selectively discarding, and multiplexing network data/voice packets from sending users/applications using a queueing and dequeueing mechanism wherein the data/voice packets are classified into discard priorities *(determined/read the priority)*, put *(inserted)* into priority queues, then multiplexed and transmitted *(processed)* (**Hluchyj**, C4: L41-61, C5: L43-68, C6: L1-56 and C7: L17-59).

Therefore, **Prior Arts** do teach, "sending a message having a priority level from the client to the server, the message requesting processing by the server".

(**B**)   Applicant argued, "Prior Art is nonanalogous art".

As to point (**B**), in response to applicant's argument that Prior Art is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992).

In this case, both **Li** and **Hluchyj** teaches a method for communication between at least one client and at least one server in a computer network, wherein the requests/messages (data/voice packets) are processed by the server, therefore, examiner submits that Prior Art is not analogous art.

15.   Applicant's arguments as well as request for reconsideration filed on 06/03/2004

have been fully considered but they are not deemed to be persuasive.

16.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

17.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Quang N. Nguyen whose telephone number is (703)

305-8190.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

SPE, Rupal Dharia, can be reached at (703) 305-4003. The fax phone number for the

organization is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is (703) 305-

3800/4700.

Q.N.

Quang N. Nguyen

PAUL H. KANG
PRIMARY EXAMINER .